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Date 8/23/00 Reporter _____

COMMONWEALTH EDISON COMPANY

BEFORE THE

ILLINOIS COMMERCE COMMISSION

DOCKET NO. 00-0361

PETITION FOR APPROVAL OF A REVISION TO DECOMMISIONING EXPENSE ADJUSTMENT RIDER TO TAKE EFFECT ON TRANSFER OF COMED'S GENERATING STATIONS

DIRECT TESTIMONY

SUBMITTED BY

DAVID J. EFFRON

ON BEHALF OF

THE PEOPLE OF THE STATE OF ILLINOIS

JULY 31, 2000

COMMONWEALTH EDISON COMPANY
DOCKET NO. 00-0361
TESTIMONY OF DAVID J. EFFRON
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I. STATEMENT OF QUALIFICATIONS

Q. Please state your name and business address.

A. My name is David J. Effron. My business address is 386 Main Street, Ridgefield, Connecticut.

Q. What is your present occupation?

A. I am a consultant specializing in utility regulation.

Q. Please summarize your professional experience.

A. My professional career includes over twenty years as a regulatory consultant, two years as a supervisor of capital investment analysis and controls at Gulf & Western Industries and two years at Touche Ross & Co. as a consultant and staff auditor. I am a Certified Public Accountant and I have served as an instructor in the business program at Western Connecticut State College.

Q. What experience do you have in the area of utility rate setting proceedings?

A. I have analyzed numerous electric, telephone, gas and water rate filings in different jurisdictions. Pursuant to those analyses I have prepared testimony, assisted attorneys in rate case preparation, and provided assistance during settlement negotiations with various utility companies.

I have testified in approximately two hundred cases before regulatory commissions in Alabama, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Missouri, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas and Virginia.

Q. Please describe your other work experience.

A. As a supervisor of capital investment analysis at Gulf & Western Industries, I was responsible for reports and analyses concerning capital spending programs, including project analysis, formulation of capital budgets, establishment of accounting procedures, monitoring capital spending and administration of the leasing program. At Touche Ross & Co., I was an associate consultant in management services for one year and a staff auditor for one year.

Q. Have you earned any distinctions as a Certified Public Accountant?

A. Yes. I received the Gold Charles Waldo Haskins Memorial Award for the highest scores in the May 1974 certified public accounting examination in New York State.

Q. Please describe your educational background.

A. I have a Bachelor's degree in Economics (with distinction) from Dartmouth College and a Masters of Business Administration Degree from Columbia University

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the People of the State of Illinois.

Q. What is the purpose of your testimony?

A. The purpose of this testimony is to address the proposal by Commonwealth Edison Company ("ComEd" or "the Company") to settle its remaining decommissioning liability by collecting $120,933,300 per year from customers for six years, commencing at the time of the transfer of its nuclear generating stations to Exelon Genco, Inc.

Q. What have you reviewed in the preparation of this testimony?

A. I have reviewed the Company's testimony and supporting exhibits, responses to data requests, and certain orders of the Illinois Commerce Commission ("the Commission") regarding decommissioning issues. At the time of the preparation of this testimony, the Company had not responded to all information requests by the Attorney General. I reserve

the right to modify or amend this testimony based on responses to those data requests.

Q. Please state your conclusions.

A. At the expected time of the transfer of its nuclear generating stations, ComEd will have already collected adequate funds from customers to provide for the decommissioning of its nuclear plants. Therefore, no further amounts for decommissioning the nuclear plants should be collected from customers subsequent to the transfer.

III. ANALYSIS OF DECOMMISSIONING PROPOSAL

A. COMPANY PROPOSAL

Q. Please describe ComEd's proposal to settle its remaining decommissioning liability.

A. ComEd is proposing to collect $120,933,300 from customers for six years, commencing at the time of the transfer of its nuclear generating stations to Exelon Genco, Inc. At the end of six years the collections for decommissioning would stop, and no additional amounts for decommissioning of the transferred nuclear generating stations would be sought from customers.

Q. How does the amount ComEd is proposing to collect compare to the amount for decommissioning presently being collected by the Company?

A. ComEd is presently collecting $84 million per year for decommissioning. Its proposal to begin collecting $120.9 million per year represents an increase of approximately 44% over what is presently being collected.

Q. Has ComEd represented that this proposal would be beneficial to customers?

A. Yes. In Edison Exhibit 2, at Page 3, Witness Berdelle states that its proposal will result in customer savings of $1.0 billion.

Q. Do you agree that the ComEd proposal will result in customer savings of $1.0 billion?

A. No. The calculation of the $1.0 billion savings to customers is shown in the response to CUB Data Request 2-37. This amount was calculated by comparing the proposal of $121 million per year for six years to what ComEd estimates it would otherwise collect for the years 2001 through 2028. To estimate its decommissioning collections for the years 2001-2028, ComEd assumes that its Rider 31 request in Docket 99-0115 of $121 million per year is approved and is in effect for six years and then projects decommissioning collections for the years 2007-2028. The $1 billion in savings is, then, the avoided costs for the years 2007-2028.

First, there is no reason to believe that decommissioning collections will increase from the present $84 million per year to $121 million per

year effective January 1, 2001. Decommissioning collections authorized by the Commission have generally been less than the amounts requested by ComEd, and the trend has been down, not up. As far as I know, the Commission has not expressed any intent to allow ComEd to increase its decommissioning collections by 44% commencing in 2001. A better comparison for the years 2001-2006 would begin with the presently authorized allowance of $84 million, with some recognition of decreases, based on what the experience has been.

Second, the projected decommissioning allowances for the years 2007-2028 must be considered speculative at this time. Again, given what the experience has been, it is likely that the actual allowances in those years will be less than the projections, rather than more.

Third, the asserted $1 billion in savings is not stated on a present value basis. Failure to compare a six-year cash flow to a 28-year cash flow on a present value basis renders such a comparison meaningless. For example, comparing the present value of the proposed collections to the present value of ComEd's forecasted collections absent the proposal (but making no other modifications) and using a discount factor of 12.5% (the pre-tax rate of return authorized in Docket No. 94-0065), the $1 billion of savings is reduced by approximately 75%.

Ultimately, however, a determination of whether ComEd's proposal is beneficial to customers must turn on an analysis of the adequacy of the

amounts in the decommissioning trusts being transferred in relation to the expected expenditures for decommissioning. As Witness Berdelle states, "the collection of decommissioning charges from customers should continue as long as necessary to fund all reasonable costs and expenses of decommissioning" (Edison Exhibit 2, Page 5). The collections should continue just that long and no longer. Thus, ComEd's proposal should be compared to the prospective collection of decommissioning charges from customers necessary to fund all reasonable costs and expenses of decommissioning. If ComEd's proposal results in the collection of decommissioning charges from customers more than necessary to fund all reasonable costs and expenses of decommissioning, then the proposal is detrimental, not beneficial, to customers. Based on my analysis, which I present below, no further collections from customers are necessary. Therefore, the Commission should reject ComEd's proposal.

B. REQUIRED DECOMMISSIONING COLLECTIONS 2001-2006

Q. Have you reviewed ComEd's development of its proposed annual provision for decommissioning costs?

A. Yes. The estimated decommissioning costs and the assumptions used to calculate the annual provision for decommissioning are shown on Edison Exhibit 2, Attachment B. The actual patterns of collections and disbursements for decommissioning for each of the nuclear units are shown in the response to AG Data Request 1-4.

Q. Have you used the information provided by the Company to estimate the collection of decommissioning charges from customers necessary to fund the reasonable costs of decommissioning?

A. Yes. However, I have made certain modifications to the Company's estimates of decommissioning costs. In particular, I have eliminated the contingency allowances included in the development of the estimated decommissioning cost. In addition, I have also calculated the effect of license extensions for certain of the nuclear units and the effect of removing site restoration costs.

1. Estimated Decommissioning Costs

Q. Have you reviewed the Company's estimate of decommissioning costs?

A. Yes. ComEd's estimates of decommissioning costs, by unit, are summarized on Edison Exhibit 2, Attachment B, Page 2. The estimates are stated in year 2000 dollars and escalated to future decommissioning costs using the Company's assumed escalation rates. The estimates are based on site-specific studies prepared by TLG Services, Inc. ("TLG"). The Company presented these estimates in Docket No. 99-0115, and they form the basis for the $120.9 million in annual decommissioning collections proposed by the Company in that docket and also in this docket. The Company's decommissioning cost estimates for the operating nuclear units, stated in year 2000 dollars, are summarized on my Schedule DJE-4, Page 1.

Q. In estimating the costs of decommissioning, did the Company include contingency allowances in its site-specific studies?

A. Yes. Contingency allowances were added to the components of the forecasted decommissioning costs. The contingency allowances for each of the nuclear units are shown on my Schedule DJE-4, Page 2.

Q. In your opinion, is the inclusion of contingency allowances in the estimate of the cost of decommissioning appropriate?

A. No. Contingency allowances should not be included in the estimate of the cost of decommissioning that serves as the basis for determining the annual amounts necessary to fund the reasonable costs of decommissioning.

Q. Why do you believe that the inclusion of contingency allowances is inappropriate?

A. First, the decommissioning costs presented by the Company in this case are based on site-specific studies. Although the cost estimates used by the NRC in developing its formulas for minimum funding may include contingency allowances, this does not necessarily mean that contingency allowances are needed if site specific studies are used to develop estimated costs of decommissioning. The site-specific studies reduce the potential for additional costs above the costs considered in an estimate that is to be

used generically for decommissioning cost projections at different sites. For example, the site-specific studies should consider the effect of complexities particular to the nuclear plant being decommissioned. In addition, a site-specific study should include recognition of all costs that are particular to the specific site, but might not be generic to all sites. These factors should reduce the need for contingency allowances in a site-specific study.

Second, there are three alternative decommissioning methods for nuclear power plants: immediate dismantling, entombment followed by delayed dismantling, and safe storage followed by delayed dismantling. In estimating the decommissioning cost, the Company has assumed immediate dismantling, which is the most costly of the three alternatives on a present value basis. To the extent that either of the other alternatives is ultimately used, this would reduce the necessary funds that must be available at the time that decommissioning begins. Given that the Company has assumed the most costly of the three alternatives, there is no need to further increase the cost by the addition of contingency allowances.

In fact, it is my understanding that it is the stated policy of ComEd to employ the safe storage alternative if decommissioning funding is not adequate to pay decommissioning costs at the time of the cessation of operations of any particular nuclear unit. As long as the return on the

decommissioning funding is greater than the escalation of the cost of decommissioning plus the cost of safe storage, the fund will eventually be sufficient to pay decommissioning costs. Thus if the cost of decommissioning is greater than anticipated, there is an alternative to immediate dismantlement to address this possibility. Again, this should mitigate the need for any contingency allowance.

Third, the site-specific cost estimates include costs to restore the sites to green field status by removing all non-radiological plant systems and structures. It is my understanding that 1) this goes beyond NRC requirements; 2) this goes beyond the requirements of Illinois law; 3) these costs may never actually be incurred, depending on the use of the site after decommissioning is completed. It is inappropriate to include these costs that may never be incurred and to also include separate contingency allowances in the estimated cost of decommissioning the nuclear units.

Q. Should contingency allowances be eliminated from the total estimated decommissioning cost for the purpose of determining the annual contribution to the external funds?

A. Yes. The contingency allowances are speculative. As the Commission noted in its Order in Docket No. 86-0125 (Illinois Power, July 15, 1987), the intent in establishing an annual decommissioning provision is "to

provide for decommissioning costs which are sufficiently certain to be incurred and reasonable in amount." Contingency allowances are not sufficiently certain to be incurred to the extent that they should be included in the estimate of decommissioning costs.

In Docket No. 94-0065, (Commonwealth Edison Company, January 9, 1995), the Commission stated that "use of site specific studies reduces the need for inclusion of a contingency factor" (Order, Page 68), and that it was "unable to find that the Company's inclusion of an add-on 'contingency factor' of 25% (or any other percentage) in nuclear decommissioning costs satisfies the requirements of certainty and reasonableness of amount" (Page 69, emphasis added). I agree with those conclusions and see no reason why they should be modified at this time.

Q. In its order in Docket No. 94-0065, the Commission stated "At the heart of the 25% decommissioning contingency factor controversy is the issue of intergenerational equity" (Page 67). If intergenerational equity ceases to be the primary issue, does this affect the validity or applicability of contingency allowances?

A. No, just the opposite. Intergenerational equity is the balancing of interests between present ratepayers and future ratepayers. If the use of contingency allowances is questionable when the issue is one of intergenerational equity, it is clearly inappropriate when the issue is one

of balancing the interests of investors and ratepayers. When it appeared that the nuclear units would be part of regulated utility operations until their time of retirement, the annual provision for decommissioning would be subject to a continuing fine-tuning process. That is, the annual provision for decommissioning could be modified as more information became available, and ratepayers, as well as investors, would be protected. Now, with the nuclear units, and the associated decommissioning trusts being transferred to a non-utility affiliate, outside the jurisdiction of the Commission, that perpetual fine-tuning process is no longer available. The application of a contingency allowance for unspecified costs, costs that may never be incurred, has the potential to confer a substantial windfall to investors, at the expense of ratepayers. Therefore, contingency allowances for unspecified costs should not be included in the estimates for decommissioning at this time.

Q. Have you calculated the cost of decommissioning the nuclear units exclusive of contingency allowances?

A. Yes. Schedule DJE-4, Page 2 shows the decommissioning cost estimates from the site-specific studies conducted by TLG stated in 1996 dollars. This schedule shows the decommissioning costs, restoration costs, contingencies, and the effective average contingency percentages. The contingency percentages are stated as percentages of total costs excluding

the contingencies themselves. For the non-operating units, Dresden 1, Zion 1, and Zion 2, the decommissioning costs do not include actual amounts expended prior to 1999, as the purpose of this exercise is to determine prospective decommissioning allowances.

Schedule DJE-4, Page 1 shows the decommissioning costs estimated by ComEd for the operating units in Column (1) stated in year 2000 dollars. These estimates represent the 1996 dollars escalated to 2000 dollars. In Column (2), the year 2000 dollar cost estimates are deflated to 1999 dollars, using the Company's assumed escalation rate of 4.11%. I have restated the estimated costs to 1999 dollars to be consistent with the other elements of this analysis.

The estimated decommissioning costs excluding the contingencies are shown in Column (3). These decommissioning cost estimates were developed by eliminating the percentage contingency allowances shown on Schedule DJE-4, Page 2, Column (7).

Q. Are the amounts shown on Schedule DJE-4, Page 1, Column (3) the estimated decommissioning costs that you use as the basis for determining the annual amounts necessary to fund the reasonable costs of decommissioning?

A. No. While I propose to eliminate the Company's contingency allowances, I propose to do so only to the extent that that the estimated

decommissioning costs are not reduced below the amounts calculated for each unit according to the NRC generic estimation method, sometimes referred to as the "NRC minimums" for decommissioning funds. Schedule DJE-4, Page 1, Column (4) shows NRC minimums for each of the operating units, stated in 1999 dollars. Column (5) shows the effect of eliminating the contingency allowances down to the NRC minimum for each operating nuclear unit. In this analysis, I use the amounts in Column (5) as the estimated decommissioning costs, stated in 1999 dollars.

Q. How did you use the amounts on Schedule DJE-4, Page 1 to determine the annual amounts necessary to fund the reasonable costs of decommissioning?

A. I began by determining the adequacy of the decommissioning funding for the operating units. This is shown on Schedule DJE-2, Page 1. Column (1) of this schedule shows the expected license expiration year for each of the units, assuming no extensions of any of the licenses. Column (2) shows the estimated decommissioning costs stated in 1999 dollars. These amounts are carried forward from Schedule DJE-4, Page 1. The decommissioning costs stated in future dollars are shown in Column (3) and were calculated by escalating the 1999 dollars using ComEd's assumed escalation rate of 4.11% from Edison Exhibit 2, Attachment B.

The amounts in Column (3) assume that the decommissioning costs will all be incurred in the year of the license expiration.

The amounts in Column (4) adjust the amounts in Column (3) to recognize that the decommissioning costs will not all be incurred in the year of license expiration, but, rather, will be incurred over a number years after the license expiration. The amounts remaining in the funds will continue to earn a return during the years that the decommissioning takes place, but the amounts expended after the first year will continue to be affected by escalation. Schedule DJE-2, Page 4, Column (1) shows the approximate average pattern of decommissioning expenditures by year after license expiration, based on the Company's response to AG Data Request 1-4. With that pattern of expenditures, a return on investment of 5.90% during the dismantlement period, and 4.11% annual escalation, the amount necessary to fund the expenditures is 92.76% of the amount that would be necessary if all the expenditures were incurred at the time of license expiration. The amounts on Schedule DJE-2, Page 1, Column (4) recognize the effect of spreading the decommissioning expenditures over a number of years subsequent to the license expiration by taking 92.76% of the amounts in Column (3).

Schedule DJE-2, Page 1, Column (5) is the amount of the decommissioning fund for each unit as of the end of 1999. The future value of the funds at the time of license expiration, shown in Column (6),

was calculated by assuming that the amounts in the funds would earn a return of 7.40% per year. This approximates the combined average return assumed by ComEd for its tax qualified and non-tax qualified funds from Edison Exhibit 2, Attachment B.

Comparing the amounts in Column (6) to the amounts in Column (4), it can be seen that the amounts in each of the decommissioning funds for the operating units will be greater than the amounts that will be needed to decommission the units, even assuming no further contributions to the decommissioning funds. The amount of the excess in each of the funds is shown in Column (7). The present value of the amount of the excess, using the 7.40% assumed return on investment as the discount rate, is shown in Column (8).

As of the end of 1999, the decommissioning funds for the operating units were more than adequate to pay for the decommissioning of these units. The total excess in the decommissioning funds for these units was approximately $168 million.

Q. What about the non-operating units?

A. The funded status of the non-operating units is shown on Schedule DJE-3. On this schedule, I have calculated the present value of prospective decommissioning requirements, as presented by the ComEd, and then adjusted that value to eliminate the contingency allowances included by

the Company in its estimates. Comparing the adjusted present value of the decommissioning requirements to the decommissioning funds as of the end of 1999, it can be seen that the funds for the non-operating units were approximately $253 million less than the amount needed to complete the decommissioning of the non-operating units.

Q. As the funding deficiency for the non-operating units is greater than the funding excess for the operating units, does this mean that there was a net fund deficiency as of the end of 1999?

A. No. There are three other sources of funds that must be considered. First, ComEd collected amounts for decommissioning from customers prior to the establishment of separate funds, referred to as the "pre-1989 collections". ComEd is in the process of transferring the pre-1989 collections to the separate funds. As of the end of 1999, approximately $71.7 million still remained to be transferred. As this amount has already been collected from ratepayers, the availability of these funds for decommissioning must be recognized.

Second, ComEd collected $39.4 million from customers in 1999 that had not been contributed to the decommissioning funds as of the end of 1999. This amount was contributed in March 2000 and should be included in the funds available for future decommissioning.

Third, from the end of 1999 to the end of 2000, when the proposed transfer will take place, ComEd will collect $84.0 million from customers through Rider 31 and contribute this amount to the decommissioning funds. The collection of this amount must also be considered in assessing the present adequacy of decommissioning funding.

Q. With these other amounts taken into account, is the decommissioning funding as of the end of 1999 adequate to provide for decommissioning costs that the Company can reasonably be expected to incur?

A. Yes. The excess decommissioning funding for the operating units plus the pre-1989 collections plus the year 2000 Rider collections is more than adequate to make up for the non-operating units' fund deficiency. I have summarized the excess decommissioning funding on Schedule DJE-1. As can be seen on this schedule, the decommissioning funds available exceed the reasonably expected decommissioning costs by $109.9 million, assuming that there are no license extensions for any of the operating units.

2. Operating License Extensions

Q. In assessing the adequacy of decommissioning funding, should the Commission consider the possibility that the operating licenses of the nuclear units could be extended?

A. Yes. ComEd has stated that is has begun an analysis of license renewal for the Dresden and Quad Cities units. While it might be open to argument whether it is appropriate to assume that the licenses will be extended, at a minimum, the Commission should be aware of what the effect of license extensions would be on the calculated adequacy of the decommissioning funds. ComEd would not have begun an analysis of license renewals unless there was some reasonable possibility that the process would ultimately result in the renewal of those licenses. Therefore, the possibility of such extensions cannot be ignored.

Q. Have you calculated what the effect would be if license extensions are authorized for those units for which ComEd has begun an analysis of license renewal?

A. Yes. On Schedule DJE-2, Page 2, I show the effect of twenty-year license extensions for the Dresden and Quad Cities units. I have assumed no license extensions for any of the other units. As can be seen on this schedule there are substantial increases to the calculated fund excesses for the four units for which there are license extensions. The increase in the excess funding for Dresden is more than $100 million for each unit. The increase in the excess funding for Quad Cities is more than $80 million for each unit. In total, the excess funding for the operating units as of the end of 1999 increases from $168 million to $588 million.

Q. What would the effect of these license extensions be on the overall funding status?

A. As I show on Schedule DJE-1, if its assumed that the Dresden and Quad Cities operating licenses are extended by twenty years, then the decommissioning funds available would exceed the reasonably expected decommissioning costs by $529 million.

Q. Have you calculated what the effect would be if license extensions were authorized for all of the operating units?

A. If twenty-year license extensions are ultimately authorized for each of ComEd's operating nuclear units then the decommissioning funds available would exceed the reasonably expected decommissioning costs by over $900 million (Schedule DJE-1).

3. Site Restoration Costs

Q. You stated above that the Company included site restoration costs, including the removal of non-radiological structures, in the cost of decommissioning. Have you removed those costs in your analysis?

A. No, I have not.

Q. What would happen if these costs were eliminated from your analysis?

A. Other things equal, the calculated amount of excess funding would be even greater. In Docket No. 94-0065, the Commission found that it could not "allow ratepayers to pay for returning facilities to greenfield status when, in fact, some facilities may be re-used", adding "it would be unwise for the Commission to allow funds for greenfield status without being certain that nonradioactive facilities will be returned to greenfield status" (Order, Page 58). In effect, by not eliminating the site restoration costs from the total decommissioning costs, I have built in a contingency allowance, as these costs may never actually be incurred.

Q. What would happen if site restoration costs were eliminated from the analysis but the other contingency allowances were included?

A. As can be seen on Schedule DJE-4, Page 2, the contingency allowances are greater than the estimated site restoration costs. Therefore, elimination of the site restoration costs does not reduce the estimated costs of decommissioning by as much as the elimination of the contingency allowances. If it is assumed that there are no license extensions, there would be a decommissioning funding excess of approximately $25 million as of the end of 1999. If it is assumed that there are license extensions at only the Dresden and Quad Cities units, the calculated excess decommissioning funding as of the end of 2000 is over $400 million. Thus, there is an excess in the decommissioning funding, even if the contingency

allowances other than the site restoration costs are included as part of the decommissioning funding analysis.

4. Escalation Factor

Q. In your above analyses, you have used the Company's assumed escalation factor of 4.11%. Have you examined the effect of modifying this assumption?

A. Yes. In response to Attorney General Data Request 2-2, ComEd provided a calculation that it characterized as "the traditionally accepted overall decommissioning escalation". The escalation factor in this response is 4.74%. Using this as the factor for nuclear decommissioning and 2% escalation (which I believe is a reasonable estimate of future general inflation) for site restoration, the weighted average escalation factor is 4.44%. This weighted average approximates the average inflation factor used by ComEd to escalate the estimated decommissioning costs from 1996 dollars to 2000 dollars. If this decommissioning factor is used in my analysis, then without contingencies, the decommissioning funds would be deficient by approximately $28 million at the end of 2000, assuming no license extensions. If the operating licenses for the Dresden and Quad Cities units are extended by twenty years, then the decommissioning funds available would exceed expected decommissioning costs by $380 million. If the operating licenses for all units are extended by twenty

years, then the decommissioning funds available would exceed expected decommissioning costs by $820 million.

If an escalation rate of 4.74% is applied to the nuclear decommissioning costs (excluding site restoration but including other contingencies) the decommissioning funds would be deficient by approximately $247 million at the end of 2000, assuming no license extensions. If the operating licenses for the Dresden and Quad Cities units are extended by twenty years, then the decommissioning funds available would exceed expected decommissioning costs by $160 million. If the operating licenses for all units are extended by twenty years, then the decommissioning funds available would exceed expected decommissioning costs by $600 million.

If an escalation rate of 4.95% (response to Staff Data Request ENG 1.8) is applied to the nuclear decommissioning costs (again excluding site restoration but including other contingencies) the decommissioning funds would be deficient by approximately $347 million at the end of 2000, assuming no license extensions. If the operating licenses for the Dresden and Quad Cities units are extended by twenty years, then the decommissioning funds available would exceed expected decommissioning costs by $50 million. If the operating licenses for all units are extended by twenty years, then the decommissioning funds available would exceed expected decommissioning costs by $480 million.

IV. SUMMARY

Q. Please summarize your testimony.

A. ComEd's proposal to settle its remaining decommissioning liability by collecting $120.9 million per year from customers for six years, commencing at the time of the transfer of its nuclear generating stations to Exelon Genco, is not beneficial to customers. Under most reasonable sets of assumptions, the liability for future decommissioning costs will be adequately funded as of the end of 2000, and ComEd should not be allowed to collect anything from customers for decommissioning subsequent to December 31, 2000.

Given the magnitude of the dollars involved and the uncertainty of projections going out twenty years and more, it is understandable that ComEd would sincerely prefer that any potential error be on the side of over-funding rather than under-funding. Ideally, from the perspective of ComEd, the possibility of under-funding should be eliminated. However, the only way to achieve such a goal is to adopt overly conservative assumptions in calculating the amounts necessary to provide for decommissioning. Thus, ComEd proposes to include contingency allowances in the decommissioning cost estimates. ComEd proposes to include site restoration costs in the decommissioning cost estimates although such costs may never actually be incurred. ComEd proposes to

disregard the possibility of operating license extensions, even as the possibility of such extensions is being investigated.

The problem is that adoption of such overly conservative assumptions necessarily results in a high likelihood that the decommissioning costs will be over-funded. This will ultimately result in a windfall to ComEd, Exelon, and Exelon's shareholders at the expense of customers. The Commission should balance the interests of investors and customers by adopting reasonable assumptions. The Commission should not adopt assumptions that would virtually eliminate all risks to ComEd at the expense of customers. Indeed, given that ComEd has alternatives available that can mitigate the effect of under-funding, such as extending the time period of safe storage, while customers have no recourse if there is over-funding, arguably the Commission should adopt assumptions that eliminate any possibility of over-funding. However, I am not recommending that course. I am recommending nothing more than that the Commission adopt assumptions that are balanced, reasonable, and equitable. Under such assumptions, future decommissioning costs are adequately funded, and there is no need for further collections from customers subsequent to the transfer of the nuclear plants to Exelon Genco.

Q. Does this conclude your testimony?

A. Yes.

SCHEDULES

Schedule DJE-1

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING REQUIREMENTS VS. FUNDING
($Million)

		W/O Lic. Extension	DR, QC License Extension	All Units License Extension
Excess Decom Funding, Operating Units, EOY 1999	(A)	$168.1	$587.5	$1,025.5
Decom Fund Deficiency, Non-Op. Units, EOY 1999	(B)	253.3	253.3	253.3
Total Decom Fund Excess (Deficiency), EOY 1999		($85.2)	$334.2	$772.2
Prior Collections of Decom Costs ("Pre-1989")	(C)	71.7	71.7	71.7
Decom Collections – 1999, Contributed in 2000	(D)	39.4	39.4	39.4
Rider 31 Decom Collections, 2000	(E)	84.0	84.0	84.0
Excess Decommissioning Funds Available, EOY 2000		$109.9	$529.2	$967.3

Sources:
(A) Schedule DJE-2, Pages 1,2,3
(B) Schedule DJE-3
(C) Edison Exhibit 2, Page 12 6*10.961+5.9
(D) Response to AG 2-9
(E) Response to CUB 2-37

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING REQUIREMENTS – OPERATING UNITS
($Million)

Unit	(1) License Expir.	(2) Decom 1999$	(3) Decom Future$	(4) Future PV of Decom$	(5) Decom Fund 1999$	(6) Fut Val of Decom Fund	(7) FV Excess	(8) PV Excess
Dresden 2	2006	385.0	510.4	473.4	288.2	475.0	1.6	1.0
Dresden 3	2011	404.8	656.3	608.8	262.2	617.6	8.8	3.7
QuadCities 1	2012	289.0	487.9	452.5	192.1	485.9	33.4	13.2
QuadCities 2	2012	291.9	492.7	457.0	193.2	488.7	31.7	12.5
LaSalle 1	2022	407.0	1,027.8	953.4	226.3	1,168.9	215.5	41.7
LaSalle 2	2023	438.8	1,153.7	1,070.1	221.9	1,231.0	160.9	29.0
Byron 1	2024	328.0	897.8	832.8	169.7	1,011.1	178.3	29.9
Byron 2	2026	363.6	1,078.7	1,000.5	156.6	1,076.2	75.7	11.0
Braidwood 1	2026	328.0	973.1	902.6	154.3	1,060.4	157.8	23.0
Braidwood 2	2027	389.9	1,204.4	1,117.2	154.4	1,139.6	22.5	3.0
Present Excess Value of Decom Funds								168.1

Column Notes
(1) Response to CUB 2-38
(2) Schedule DJE-4, Page 1
(3) Column (2) escalated to license expiration
(4) Column (3) X Decom Factor over Time from Schedule DJE-2, Page 4
(5) Response to AG-1-4
(6) Column (5) grown to license expiration, at assumed return on investment
(7) Column (6) – Column (4)
(8) Present Value of Column (7)

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING FUND REQUIREMENTS – OPERATING UNITS
WITH LICENSE EXTENSIONS FOR DRESDEN AND QUAD CITIES
($Million)

Unit	(1) License Expir.	(2) Decom 1999$	(3) Decom Future$	(4) Future PV of Decom$	(5) Decom Fund 1999$	(6) Fut Val of Decom Fund	(7) FV Excess	(8) PV Excess
Dresden 2	2026	385.0	1,142.2	1,059.5	288.2	1,980.7	921.2	134.0
Dresden 3	2031	404.8	1,468.8	1,362.4	262.2	2,575.0	1,212.6	123.5
QuadCities 1	2032	289.0	1,091.8	1,012.7	192.1	2,026.1	1,013.4	96.1
QuadCities 2	2032	291.9	1,102.7	1,022.8	193.2	2,037.7	1,014.9	96.2
LaSalle 1	2022	407.0	1,027.8	953.4	226.3	1,168.9	215.5	41.7
LaSalle 2	2023	438.8	1,153.7	1,070.1	221.9	1,231.0	160.9	29.0
Byron 1	2024	328.0	897.8	832.8	169.7	1,011.1	178.3	29.9
Byron 2	2026	363.6	1,078.7	1,000.5	156.6	1,076.2	75.7	11.0
Braidwood 1	2026	328.0	973.1	902.6	154.3	1,060.4	157.8	23.0
Braidwood 2	2027	389.9	1,204.4	1,117.2	154.4	1,139.6	22.5	3.0
Present Excess Value of Decom Funds								587.5

Column Notes
(1) Response to CUB 2-38, with 20 years added to Dresden and Quad Cities
(2) Schedule DJE-4, Page 1
(3) Column (2) escalated to license expiration
(4) Column (3) X Decom Factor over Time from Schedule DJE-2, Page 4
(5) Response to AG-1-4
(6) Column (5) grown to license expiration, at assumed return on investment
(7) Column (6) – Column (4)
(8) Present Value of Column (7)

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING FUND REQUIREMENTS – OPERATING UNITS
WITH LICENSE EXTENSIONS FOR ALL UNITS
($Million)

Unit	(1) License Expir.	(2) Decom 1999$	(3) Decom Future$	(4) Future PV of Decom$	(5) Decom Fund 1999$	(6) Fut Val of Decom Fund	(7) FV Excess	(8) PV Excess
Dresden 2	2026	385.0	1,142.2	1,059.5	288.2	1,980.7	921.2	134.0
Dresden 3	2031	404.8	1,468.8	1,362.4	262.2	2,575.0	1,212.6	123.5
QuadCities 1	2032	289.0	1,091.8	1,012.7	192.1	2,026.1	1,013.4	96.1
QuadCities 2	2032	291.9	1,102.7	1,022.8	193.2	2,037.7	1,014.9	96.2
LaSalle 1	2042	407.0	2,300.2	2,133.6	226.3	4,873.8	2,740.2	127.2
LaSalle 2	2043	438.8	2,581.9	2,394.8	221.9	5,132.7	2,737.9	118.4
Byron 1	2044	328.0	2,009.2	1,863.7	169.7	4,215.7	2,352.1	94.7
Byron 2	2046	363.6	2,414.0	2,239.1	156.6	4,487.4	2,248.2	78.5
Braidwood 1	2046	328.0	2,177.8	2,020.0	154.3	4,421.5	2,401.4	83.8
Braidwood 2	2047	389.9	2,695.5	2,500.2	154.4	4,751.7	2,251.5	73.2
Present Excess Value of Decom Funds								1,025.5

Column Notes
(1) Response to CUB 2-38, with 20 years added to all units
(2) Schedule DJE-4, Page 1
(3) Column (2) escalated to license expiration
(4) Column (3) X Decom Factor over Time from Schedule DJE-2, Page 4
(5) Response to AG-1-4
(6) Column (5) grown to license expiration, at assumed return on investment
(7) Column (6) – Column (4)
(8) Present Value of Column (7)

COMMONWEALTH EDISON COMPANY
EFFECT OF DECOMMISSIONING OVER 9 YEARS
($000)

Total Decommissioning Cost at Time Zero 1,000

Year	(1) Decom Pattern	(2) Decom Expend.
1	0.05	52.1
2	0.11	119.2
3	0.19	214.4
4	0.20	235.0
5	0.17	207.9
6	0.12	152.8
7	0.09	119.1
8	0.04	55.2
9	0.03	43.1

Present Value, Discount Rate 5.90% * 927.6

Ratio of Initial Fund to Cost at Time Zero 92.76%

Column Notes
(1) Estimated Pattern of Expenditures for Decommissioning, Constant $
(2) Column (2) * 1,000, Escalated to Current Year
* Return during dismantlement

COMMONWEALTH EDISON COMPANY
SUMMARY OF ASSUMPTIONS IN DECOM ANALYSIS

Escalation Factor	4.11%
Return on Investment	7.40%
Base Year	1999
Factor for Decommissioning over Time	92.76%

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING REQUIREMENTS – NON-OPERATING UNITS
($Million)

Year		(1) Dresden	(2) Zion 1	(3) Zion 2	(4) Total
2001		29.6	16.8	27.2	73.6
2002		29.6	16.8	27.2	73.6
2003		29.6	16.8	27.2	73.6
2004		29.6	16.8	27.2	73.6
2005		29.6	16.8	27.2	73.6
2006		29.6	16.8	27.2	73.6
2007			8.4	15.2	23.6
Present Value, 1999		129.8	78.4	127.8	336.0
Decom Fund, Y/E 1999	(A)	92.8	212.1	222.7	527.6
Year 2000 Contribution	(A)	34.0	8.2	16.2	58.4
PV of Decom Requirements		256.6	298.7	366.7	922.0
PV Excl. Contingency	(B)	216.7	253.0	311.3	780.9
Decom Fund, Y/E 1999	(A)	92.8	212.1	222.7	527.6
Fund Deficiency, Y/E 1999		123.9	40.9	88.6	253.3

Column Notes
(1) Response to AG 1-4
(2) Response to AG 1-4
(3) Response to AG 1-4
(4) Column (1) + Column (2) + Column (3)

(A) Response to AG 1-4
(B) PV of decom reqs. excluding contingency, from Schedule DJE-4, Page 2

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING COST ESTIMATES – OPERATING UNITS
($Million)

Unit	(1) ComEd Year2000 Estimate	(2) Year1999 Estimate	(3) Excl. Conting.	(4) NRC Minimum	(5) Larger of (3) or (4)
Dresden 2	446.2	428.6	345.3	385.0	385.0
Dresden 3	508.7	488.6	404.8	385.0	404.8
Quad Cities 1	301.7	289.8	231.8	289.0	289.0
Quad Cities 2	368.4	353.9	291.9	289.0	291.9
LaSalle 1	471.3	452.7	367.6	407.0	407.0
LaSalle 2	559.6	537.5	438.8	407.0	438.8
Byron 1	322.0	309.3	254.7	328.0	328.0
Byron 2	462.0	443.8	363.6	328.0	363.6
Braidwood 1	323.3	310.5	252.4	328.0	328.0
Braidwood 2	496.1	476.5	389.9	328.0	389.9
Totals	4,259.3	4,091.2	3,340.8	3,474.0	3,625.9

Column Notes
(1) Edison Exhibit 2, Attachment B, Page 2
(2) Column (1) deflated by 4.11% to 1999
(3) Column (2) excluding contingency from Schedule DJE-4, Page 2
(4) Response to AG-1-3
(5) Larger of Column (3) or Column (4)

COMMONWEALTH EDISON COMPANY
DECOMMISSIONING COST ESTIMATES – 1996 $
($Million)

Unit	(1) Decom Costs	(2) Conting.	(3) Restore Costs	(4) Conting.	(5) Total Costs	(6) Total Conting.	(7) % Conting.
Dresden 2	351.8	69.9	23.5	3.0	375.3	72.9	24.1%
Dresden 3	518.8	91.0	48.1	6.3	566.9	97.3	20.7%
Quad Cities 1	322.0	65.6	16.3	2.1	338.3	67.7	25.0%
Quad Cities 2	497.5	89.0	42.0	5.5	539.5	94.5	21.2%
LaSalle 1	360.2	70.0	36.2	4.5	396.4	74.5	23.1%
LaSalle 2	421.0	80.0	49.5	6.4	470.5	86.4	22.5%
Byron 1	225.6	42.3	45.2	5.5	270.8	47.8	21.4%
Byron 2	322.1	61.7	66.4	8.5	388.5	70.2	22.1%
Braidwood 1	228.1	45.6	43.7	5.3	271.8	50.9	23.0%
Braidwood 2	348.0	67.0	69.2	8.8	417.2	75.8	22.2%
Non-Operating Units:							
Dresden 1	246.4	39.0	27.6	3.6	274.0	42.6	18.4%
Zion 1	376.9	58.4	26.9	3.4	403.8	61.8	18.1%
Zion 2	468.0	71.7	43.9	5.7	511.9	77.4	17.8%

Column Notes
(1) From TLG Site Specific Studies
For Non-Operating Units, $ prior to 1999 (actual spent) excluded
(2) From TLG Site Specific Studies
(3) From TLG Site Restoration Cost Estimate
(4) From TLG Site Restoration Cost Estimate
(5) Column (1) + Column (3)
(6) Column (2) + Column (4)
(7) Column (6)/(Column (5) – Column (6))